

P20684.A03

structured and arranged to acquire data related to states of said signal paths, lever positions, states of said filters, dynamics of said modifying processors, amplitudes of the audio signals, and current positions of said at least two operating elements, and to transmit this data to said at least one screen for display.

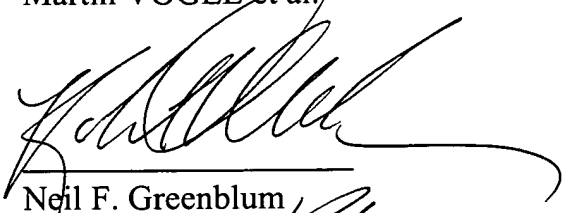
a11 30. The apparatus in accordance with claim 25, further comprising a graphic computer arranged to couple said computer to said at least one screen.

REMARKS

The Examiner is respectfully requested to enter the foregoing amendment prior to calculation of any fees and to examination of the above-identified patent application.

Should there be any questions, the Examiner is invited to contact the undersigned at the below listed number.

Respectfully submitted,
Martin VOGEL et al.


Neil F. Greenblum
Reg. No. 28,394

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GREENBLUM & BERNSTEIN, P.L.C.
1941 Roland Clarke Place
Reston, VA 20191
(703) 716-1191

APPENDIX

Marked-Up Copies of the Amended Paragraphs:

Please replace the bridging paragraph on pages 1 and 2 with the following paragraph:

Another known embodiment for such devices with a screen is known from the technology of electronic computers, so-called PC's. Here, an arrow can be directed onto a field on the screen by [means of] a so-called mouse where, e.g., a value can be selected from a given selection of values. Or, originating from a given value, the next given value can be selected by an impulse from the mouse. Such an embodiment can be configured and controlled remotely, but it is comparatively slow in its operation. The lack of a directly acting entering knob leads to an awkward operation. The simultaneous operation of several entering devices is impossible.

Please replace the first full paragraph on page 3 with the following heading and paragraph:

SUMMARY OF THE INVENTION

Therefore, [it is the object of] the present invention [, on the one hand, to create] provides a device of the above-mentioned type which allows a secure, i.e., reliable and confusion-free, but also quick feedback about values, which can be entered in an ergonomically advantageous manner by means of a manual entry element and [, on the other hand, lead to] provides a constructive design that requires little space and can easily be

constructed.

Please replace the last full paragraph on page 6 with the following paragraph:

Fig. 5 shows a view of a device according to the invention viewed in the direction towards a screen 34 with regions 35', 36', 37', etc. for displaying adjusted values and rotating knobs 35, 36, 37, etc. being elements for entering values which are assigned to a carrier 42. In addition to the mentioned entry elements, other entry elements, known per se, 38, 39 of a different type can be provided on the same screen, operating with the "touch screen" principle or being activated by [means of] a mouse. In general, the carrier 42 can be embodied transparently so that the screen 34, positioned therebehind, is visible in all parts not covered by the rotating knobs 35, 36, 37. However, additional regions 40, 41 of the carrier 42 may be covered by strip conductors, e.g., which are positioned above or below the carrier 42 or are provided as foils or are embodied as thin or thick layers. In these additional regions 40; 41 that may cover the screen in a web-like fashion, connecting all rotating knobs, the screen 34 is covered and therefore not visible.

Please replace the bridging paragraph on pages 7 and 8 with the following paragraph:

Fig. 7 shows a block wiring diagram of the device according to the invention, here, the conditions for application in an audio mixer are taken into close consideration, by way of example. An operating surface 53 should be provided with a variety of adjustment elements and display elements such as dials, lamps, etc. as customary in such audio mixers.

This operating surface [consists of] includes a carrier 54 for operating elements 55 which serve the configuration of the audio mixer, an operating element 56 which serves to influence parameters important for the processing of audio signals, and one or more screens 57 serving to display values, dials, functions, etc. The graphic computer 58 is connected to the screen as well. A computer 62 is connected to the operating surface 53 via one data bus 59, 60, and 61 each. Here, the data bus 59 transmits data or commands relating to the configuration of the audio mixer or its changes from the operating elements 55 to the computer 62. The data bus 60 provides the computer 62 with new values from the operating elements [55] 56 concerning the parameters for processing the audio signals or the algorithms used. The data bus 61 transmits data relating to the present state of the audio mixer and the audio signals from the computer 62 to the graphic computer 58 and, thus, to the screen 57. The computer 62 is also connected to a signal processor 64 via a data bus 63 and a bus 71, which processor modifies, mixes, etc. the primary audio signals. Thus, it is provided with several [entrances] inputs 65 and [exits] outputs 66 for audio signals. The signal processor 64 comprises the primary core of an audio mixer, e.g., operating digitally and thus known per se and not shown here. An algorithm library 67 is assigned to the signal processor 64, having saved all algorithms used in the processing of the signals from the entries 65. This library is connected to the signal processor 64 via a bus 69 and to the computer 62 via a bus 68.

Please replace the bridging paragraph on pages 8 and 9 with the following paragraph:

In an audio mixer of a known type, the operating surface 53 is connected directly to the process computer 64 via suitable [means] devices so that the operating elements 55, 56 can directly influence the processing of the signals for the [exits] outputs 66. In order to create additional possibilities according to the invention for operating such an audio mixer, a computer 62 is connected between the operating surface 53 and the process computer 64 which protocols the state, i.e., all settings of the audio mixer and the signals pertaining thereto. When the configuration of the switch board is changed by the operating elements 55, it occurs by [means of] corresponding data using the data bus 59 to cause the computer 62, on the one hand, to select new algorithms via the bus 68 from the algorithm library 67 and to put them out to the signal processor 64 and, on the other hand, to direct the graphic computer 58 via the data bus 61 to adjust the displays, dials etc. on the screen 57 to the new configuration. The term configuration defines the entire arrangement provided for the processing of the audio signals. It can be represented in a block wiring diagram, for instance, which lists all processes, such as increases, additions of signals, filters, lever changes, etc. Such a block wiring diagram, being precisely equivalent to a configuration, can be modified by changes of the configuration so that a different block wiring diagram is valid for the processing, etc. If the operating elements 56 are activated, however, the configuration (the block wiring diagram) remains unchanged and only the values of the parameters in the selected parameters are changed, transmitted by way of the bus 71 to the signal processor 64 and are displayed on the screen 57 via the graphic computer 58 as well. This way, such

values can be modified as depicted, e.g., in Fig. 6. Assuming the rotating knob 70 serves to provide a filter with a frequency limit, this limit is modified by rotating the rotating knob 70 and its values are displayed in 47. Additionally, it is discernible which channel was effected by this modification, etc.

Please replace the last paragraph on page 9 with the following paragraph:

The operating elements 55 represent [means] devices for defining the signal flux in the audio channels by selecting the algorithms. In the computer 62, stored program parts define means for determining the assignment of operating elements, for instance, in the meaning that a line or column of rotating knobs on the audio mixer serves to adjust equal parameters, with other parameters being influenced by elements of other lines or columns. This can also mean that singular operation elements can be blocked in a configuration and cannot cause any effect or that several parameters can be modified by a single operation element, e.g., by means of a serial approach. It can simply mean that the language of the labeling can be adjusted at the 49th position etc. or that in some sections of the display the color can be modified rhythmically or can be changed.